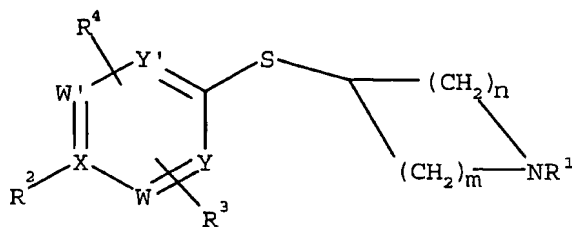


### Claims:

1. A method of treatment of a condition indicating treatment with a beta 4 subtype selective nicotinic acetylcholine receptor modulator comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



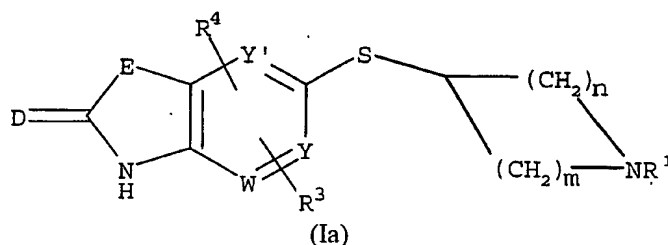
(I)

wherein:

- 10 R<sup>1</sup> is -H,  
C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
aryl-C<sub>1-4</sub>alkyl;  
R<sup>2</sup> is -H,  
15 -OH,  
-C(O)-NH<sub>2</sub>,  
-NH<sub>2</sub>,  
-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;  
V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl,  
20 lactonyl, or C<sub>1-18</sub>alkyl optionally substituted  
with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -  
C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>  
alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and  
T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro,  
25 aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy unless V is H  
in which case T is absent; or

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linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



5

wherein D is O or S; and

E is O, S,  $\text{NR}^5$ ,  $\text{C}(\text{R}^5)_2$ ,  $\text{O}-\text{CR}^5_2$ ,  $\text{NR}^5-\text{CR}^5_2$ ,  
 $\text{NR}^5-\text{CO}$ ,  $\text{CR}^5_2-\text{O}$ ,  $\text{CR}^5_2-\text{S}(\text{O})_r$ ,  $\text{CR}^5_2-\text{NR}^5$ ,  
 $\text{CR}^5_2-\text{CR}^5_2$ ,  $\text{CO}-\text{NR}^5$ , or  $\text{CR}^5=\text{CR}^5$ ;

unless X is N in which case  $\text{R}^2$  is absent

10

$\text{R}^3$  is H, halogen,  $\text{C}_{1-4}$ alkyl optionally substituted with from 1 to 3 fluorine  
 atoms, cyano,  $\text{CF}_3$ ,  $\text{OC}_{1-4}$ alkyl, aryloxy,  $\text{arylC}_{1-4}$ alkyl,  $\text{arylC}_{1-4}$ alkoxy,  $\text{C}_3$ -  
 $_{10}$ cycloalkoxy, carboxy, carbonamido,  $-\text{CO}-$ ,  $-\text{CO}_2\text{H}$ ,  $-\text{NH}_2$ ,  $\text{NH}-\text{C}_{1-4}$ alkyl,  
 aryl, hydroxy,  $-\text{SO}_2\text{NH}_2$ ,  $-\text{SO}_2\text{NHC}_{1-4}$ alkyl, or  $-\text{C}_{1-4}$ alkyl-OH;

15

$\text{R}^4$  is H, halogen,  $\text{C}_{1-4}$ alkyl optionally substituted with from 1 to 3 fluorine  
 atoms, cyano,  $\text{CF}_3$ ,  $\text{OC}_{1-4}$ alkyl, aryloxy,  $\text{arylC}_{1-4}$ alkyl,  $\text{arylC}_{1-4}$ alkoxy,  $\text{C}_3$ -  
 $_{10}$ cycloalkoxy, carboxy, carbonamido,  $-\text{CO}-$ ,  $-\text{CO}_2\text{H}$ ,  $-\text{NH}_2$ ,  $\text{NH}-\text{C}_{1-4}$ alkyl,  
 aryl, hydroxy,  $-\text{SO}_2\text{NH}_2$ ,  $-\text{SO}_2\text{NHC}_{1-4}$ alkyl, or  $-\text{C}_{1-4}$ alkyl-OH;

$\text{R}^5$  is each independently H or  $\text{C}_{1-4}$ alkyl;

X is C or N;

20

W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

25

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

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provided that

when X, W, W', Y and Y' are all C, R<sup>3</sup> and R<sup>4</sup> are H and R<sup>1</sup> is selected from H, unsubstituted C<sub>1-4</sub>alkyl and unsubstituted C<sub>3-4</sub>cycloalkyl, R<sup>2</sup> may not be -OH; and that

- 5           when one of X, Y and Y' is N, R<sup>3</sup> and R<sup>4</sup> are H and R<sup>1</sup> is selected from H, unsubstituted C<sub>1-4</sub>alkyl and unsubstituted C<sub>3-4</sub>cycloalkyl, R<sup>2</sup> may not be H.

2.       The method of claim 1

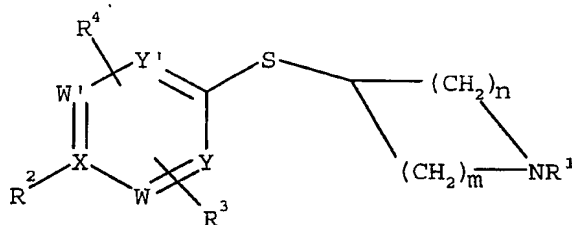
provided that

- 10           when X, W, W', Y and Y' are all C and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be -OH; and that

when one of X, Y and Y' is N and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be H.

3.       A method of treatment of dysfunctions of the central and autonomic nervous

- 15       systems comprising administering an effective amount of a compound represented by Formula (I) or pharmaceutically acceptable salts thereof:



(I)

wherein:

- 20           R<sup>1</sup> is -H,  
               C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
               selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
               aryl-C<sub>1-4</sub>alkyl;  
               R<sup>2</sup> is -H,  
 25           -OH,  
               -C(O)-NH<sub>2</sub>,

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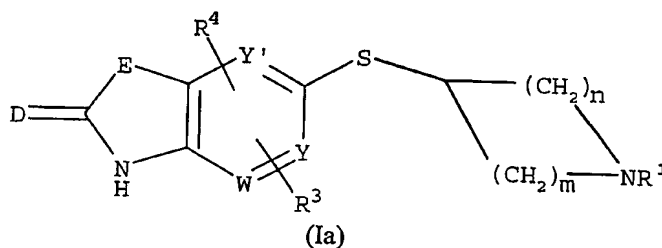
-NH<sub>2</sub>,

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl, lactonyl, or C<sub>1-18</sub>alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; andT is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro, aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy unless V is H

in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein

D is O or S; and

E is O, S, NR<sup>5</sup>, C(R<sup>5</sup>)<sub>2</sub>, O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>n</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>, CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>;unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

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R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

X is C or N;

W is C or N;

W' is C or N;

5 Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;

n is 1, 2, or 3; and

10 the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be -OH;  
and that

when one of X, Y and Y' is N and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be H;

15 and that

when R<sup>2</sup> is H, OH or NH<sub>2</sub> and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>1</sup> may not be aryl-C<sub>1-4</sub>alkyl.

4. The method of any one of claims 1 to 3 wherein

R<sup>1</sup> is -H, or

20 C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio.

5. The method of any one of claims 1 to 4, wherein

R<sup>2</sup> is -H,

25 -C(O)-NH<sub>2</sub>,

-NH<sub>2</sub>,

-NH-Q-V-T as defined in claim 1; or

linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 1;

30 unless X is N in which case R<sup>2</sup> is absent.

6. The method of any one of claims 1 to 5, wherein

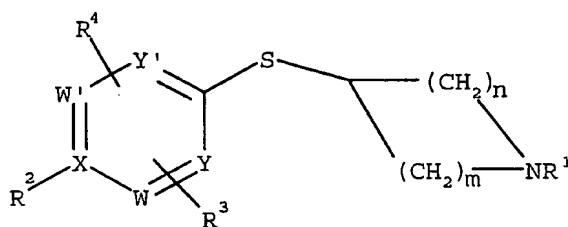
-91-

$R^2$  is  $-C(O)-NH_2$ ,  
 $-NH-Q-V-T$  as defined in claim 1; or  
 linked back to the aromatic ring so as to form a fused bicyclic compound  
 represented by Formula (Ia) as defined in claim 1;  
 5 unless X is N in which case  $R^2$  is absent.

7. The method of any one of claims 1 to 6, wherein  
 $R^2$  is  $-C(O)-NH_2$ ,  
 $-NH-Q-V-T$ , wherein Q is  $-C(O)-NH-$ , or  $-C(O)O-$ ;  
 10 V is as defined in claim 1; and  
 T is as defined in claim 1; or  
 linked back to the aromatic ring so as to form a fused bicyclic compound  
 represented by Formula (Ia) as defined in claim 1;  
 unless X is N in which case  $R^2$  is absent.

15

8. A compound of Formula (I) or pharmaceutically acceptable salts thereof for use in  
 therapy:



(I)

20 wherein:

$R^1$  is  $-H$ ,  
 $C_{1-12}$ alkyl optionally substituted with 1, 2 or 3 groups independently  
 selected from halogen, hydroxyl, thiol,  $C_{1-4}$ alkoxy or  $C_{1-4}$ alkylthio, or  
 aryl- $C_{1-4}$ alkyl;

25  $R^2$  is  $-H$ ,  
 $-OH$ ,

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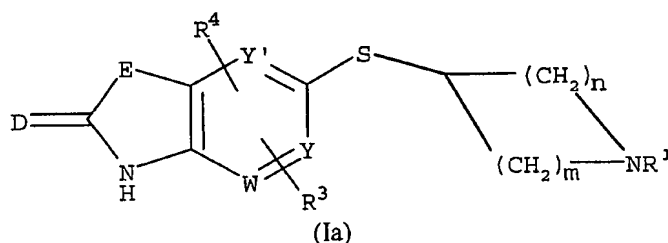
-C(O)-NH<sub>2</sub>,-NH<sub>2</sub>,

-NH-Q-V-T, wherein

Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl,lactonyl, or C<sub>1-18</sub>alkyl optionally substitutedwith halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-</sub>4alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; andT is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro,aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy unless V is H

in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein

D is O or S; and

E is O, S, NR<sup>5</sup>, C(R<sup>5</sup>)<sub>2</sub>, O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>,NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>n</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>,CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>;unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-</sub>

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cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

X is C or N;

5 W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

10 m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6;

provided that

when X, W, W', Y and Y' are all C and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be -OH;

15 and that

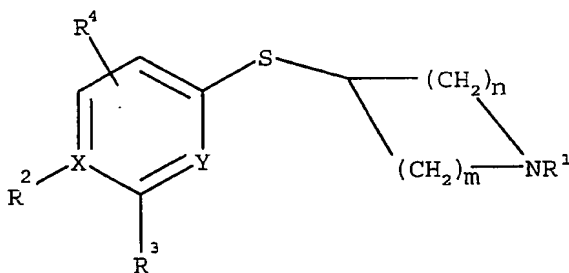
when one of X, Y and Y' is N and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be H;

and that

when R<sup>2</sup> is H, OH or NH<sub>2</sub> and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>1</sup> may not be aryl-C<sub>1-4</sub>alkyl;

and excluding compounds represented by Formula I' or pharmaceutically acceptable salts

20 thereof:



(I')

wherein:

R<sup>1</sup>, X, Y, m and n are as defined above

25 R<sup>2</sup> is -H,



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-NH<sub>2</sub>,

-NH-SO<sub>2</sub>-V-T      wherein V and T are as defined above;

unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> is    H, halogen, C<sub>1-4</sub>alkyl, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, or hydroxy;

5      R<sup>4</sup> is    H, halogen, C<sub>1-4</sub>alkyl, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, or hydroxy.

9.      A compound as claimed in claim 8 wherein

R<sup>1</sup> is    -H, or

10      C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio.

10.     A compound as claimed in claim 8 or claim 9, wherein

R<sup>2</sup> is    -H,

15      -C(O)-NH<sub>2</sub>,

-NH<sub>2</sub>,

-NH-Q-V-T as defined in claim 8; or

linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 8;

unless X is N in which case R<sup>2</sup> is absent.

20

11.     A compound as claimed in any one of claims 8 to 10, wherein

R<sup>2</sup> is    -C(O)-NH<sub>2</sub>,

-NH-Q-V-T as defined in claim 8; or

25      linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 8;

unless X is N in which case R<sup>2</sup> is absent.

12.     A compound as claimed in any one of claims 8 to 11, wherein

R<sup>2</sup> is    -C(O)-NH<sub>2</sub>,

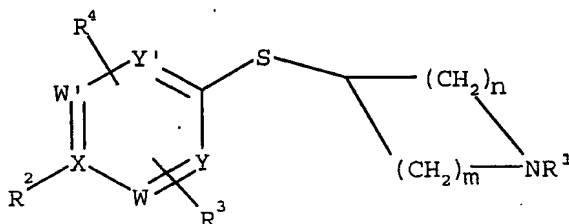
30      -NH-Q-V-T,    wherein      Q is -C(O)-NH-, or -C(O)O-;  
V is as defined in claim 8; and  
T is as defined in claim 8; or

-95-

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia) as defined in claim 8;

unless X is N in which case R<sup>2</sup> is absent.

- 5 13. A compound represented by Formula (I) or pharmaceutically acceptable salts thereof:

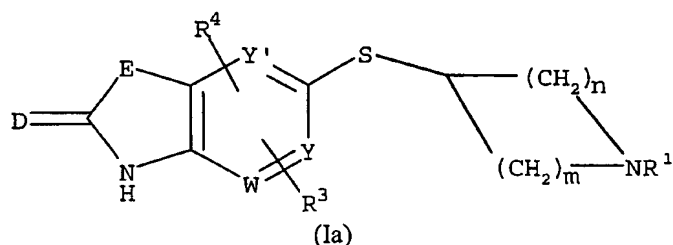


(I)

wherein:

- 10 R<sup>1</sup> is -H,  
C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently  
selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or  
aryl-C<sub>1-4</sub>alkyl;
- 15 R<sup>2</sup> is -H,  
-OH,  
-C(O)-NH<sub>2</sub>,  
-NH<sub>2</sub>,  
-NH-Q-V-T, wherein Q is -C(O)-, -C(O)-NH-, -C(O)O-, or -SO<sub>2</sub>-;  
V is H, aryl, aryl-C<sub>1-12</sub>alkyl, diaryl-C<sub>1-12</sub>alkyl,  
20 lactonyl, or C<sub>1-18</sub>alkyl optionally substituted  
with halogen, hydroxyl, C<sub>1-4</sub>alkoxy, -  
C(O)OC<sub>1-4</sub>alkyl, -OC(O)C<sub>1-4</sub>alkyl, aryl-C<sub>1-4</sub>  
alkoxy, aryloxy, or SO<sub>2</sub>C<sub>1-4</sub>alkyl; and  
T is H, halogen, C<sub>1-5</sub>alkyl, C<sub>1-4</sub>alkoxy, nitro,  
25 aryl, aryl-C<sub>1-4</sub>alkyl, or aryloxy unless V is H  
in which case T is absent; or

linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



5                                wherein                                D is O or S; and  
    E is O, S, NR<sup>5</sup>, C(R<sup>5</sup>)<sub>2</sub>, O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>,  
    NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>n</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>,  
    CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>;

unless  $X$  is  $N$  in which case  $R^2$  is absent

10 R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

15 R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

X is C or N;

20            W is C or N;

W' is C or N;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

25             $m$  is 1, 2, or 3;

$n$  is 1, 2, or 3; and

the sum of  $m$  and  $n$  is 2, 3, 4, 5, or 6;

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provided that

when X, W, W', Y and Y' are all C and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be -OH;

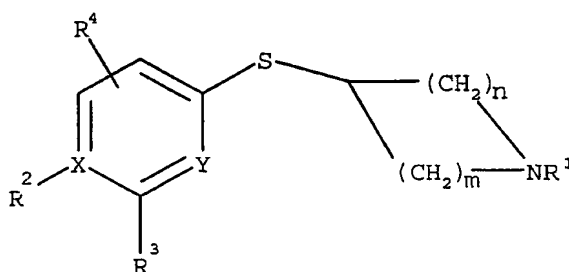
and that

when one of X, Y and Y' is N and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>2</sup> may not be H;

5 and that

when R<sup>2</sup> is H, OH or NH<sub>2</sub> and R<sup>3</sup> and R<sup>4</sup> are H, R<sup>1</sup> may not be aryl-C1-4alkyl;

and excluding compounds represented by Formula I'' or pharmaceutically acceptable salts thereof:



10

(I'')

wherein:

R<sup>1</sup>, X, Y, m and n are as defined above

R<sup>2</sup> is -H,

-NH<sub>2</sub>,

15

-NH-Q-V-T, wherein Q is -C(O)- or -SO<sub>2</sub>- and

V and T are as defined above;

unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl, OC<sub>1-4</sub>alkyl, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, or hydroxy;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl, OC<sub>1-4</sub>alkyl, CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub>alkyl, or hydroxy.

20

14. A compound as claimed in claim 13 wherein

R<sup>1</sup> is -H, or

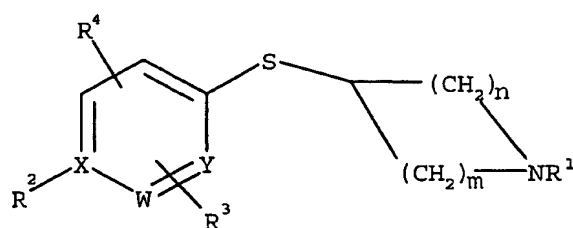
C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio.

25

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15. A compound as claimed in claim 13 or claim 14, wherein  
R<sup>2</sup> is -H,  
-C(O)-NH<sub>2</sub>,  
-NH<sub>2</sub>,  
5 -NH-Q-V-T as defined in claim 13; or  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 13;  
unless X is N in which case R<sup>2</sup> is absent.
- 10 16. A compound as claimed in any one of claims 13 to 15, wherein  
R<sup>2</sup> is -C(O)-NH<sub>2</sub>,  
-NH-Q-V-T as defined in claim 13; or  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 13;  
15 unless X is N in which case R<sup>2</sup> is absent.
17. A compound as claimed in any one of claims 13 to 16, wherein  
R<sup>2</sup> is -C(O)-NH<sub>2</sub>,  
-NH-Q-V-T, wherein Q is -C(O)-NH-, or -C(O)O-;  
20 V is as defined in claim 13; and  
T is as defined in claim 13; or  
linked back to the aromatic ring so as to form a fused bicyclic compound  
represented by Formula (Ia) as defined in claim 13;  
unless X is N in which case R<sup>2</sup> is absent.
- 25 18. A compound as claimed in claim 13 which is represented by Formula (II) or  
pharmaceutically acceptable salts thereof:

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(II)

wherein:

 $R^1$  is  $-H$ ; or

5  $C_{1-12}$  alkyl optionally substituted with 1, 2 or 3 groups  
independently selected from halogen, hydroxyl, thiol,  $C_{1-4}$  alkoxy or  $C_{1-4}$  alkylthio; or  
aryl- $C_{1-4}$  alkyl;

 $R^2$  is  $-H$ ; $-OH$ ;10  $-C(O)-NH_2$  $-NH_2$ ; $-NH-Q-V-T$  $Q$  is  $-C(O)-$ ; $-C(O)-NH-$ ;15  $-C(O)O-$ ; or $-SO_2-$  $V$  is aryl;aryl- $C_{1-12}$  alkyl;diaryl- $C_{1-12}$  alkyl;

20 lactonyl; or

$C_{1-18}$  alkyl optionally substituted with halogen, hydroxyl,  $C_{1-4}$   
alkoxy,  $-C(O)OC_{1-4}$  alkyl,  $-OC(O)C_{1-4}$  alkyl, aryl- $C_{1-4}$  alkoxy, aryloxy,  $SO_2C_{1-4}$  alkyl;

 $T$  is  $H$ ;

halogen;

25 aryl;

aryl- $C_{1-4}$  alkyl; or

aryloxy;

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unless X is N in which case R<sup>2</sup> is absent

R<sup>3</sup> and R<sup>4</sup> are each independently selected from H, halogen, C<sub>1-4</sub> alkyl, cyano, CF<sub>3</sub>, OC<sub>1-4</sub> alkyl, aryloxy, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub> cycloalkoxy, carboxy, carbonamido, -CO-, -CO<sub>2</sub>H, -NH<sub>2</sub>, NH-C<sub>1-4</sub> alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub> alkyl, -C<sub>1-4</sub> alkyl-OH;

X is C or N;

W is C or N, provided that both X and Y are not N;

Y is C or N

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

19. A compound as claimed in claim 18 wherein R<sup>1</sup> is H; C<sub>1-6</sub> alkyl optionally substituted with 1 or 2 hydroxyl groups; or aryl-C<sub>1-4</sub> alkyl.

20. A compound as claimed in claim 19 wherein R<sup>1</sup> is benzyl, p-methoxybenzyl, furanylmethyl, imidazolymethyl, pyridinylmethyl, thienylmethyl, pyridylmethyl, N-hydroxypyridylmethyl or thiazolymethyl.

21. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is H, R<sup>3</sup> is carbonamido (-CONH<sub>2</sub>) or C<sub>1-4</sub> alkyl-OH, and R<sup>4</sup> is H, C<sub>1-4</sub>alkyl, CF<sub>3</sub>, halogen or cyano.

22. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is OH, and R<sup>3</sup> and R<sup>4</sup> each independently represent H, C<sub>1-4</sub>alkyl, CF<sub>3</sub>, cyano or halogen.

23. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula -NH-Q-V-T; T is H and R<sup>3</sup> and R<sup>4</sup> each independently represent H, methyl, CF<sub>3</sub>, chloro- or cyano-.

24. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula -NH-SO<sub>2</sub>-V-T; V is aryl, -C<sub>1-12</sub> alkyl or aryl-C<sub>1-12</sub> alkyl; R<sub>3</sub> is H, methyl, CF<sub>3</sub>, Cl or cyano and R<sup>4</sup> is H.

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25. A compound as claimed in any one of claims 18 to 20 wherein  $R^2$  is of formula –  
NH-SO<sub>2</sub>-V-T, V is selected from C<sub>1-12</sub> alkyl, phenyl, naphthyl, thienyl, oxazolyl,  
isoxazolyl, or phenyl(CH=CH)–, optionally substituted with 1, 2, 3 or 4 substituents

5 selected from:

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
C<sub>1-12</sub> alkoxy;  
10 C<sub>1-12</sub> alkylthio;  
C<sub>1-12</sub> alkyl;  
C<sub>1-4</sub> alkylsulfonyl;  
-CN;  
-OCF<sub>3</sub>;  
15 -C(O)OC<sub>1-4</sub> alkyl;  
-OCH<sub>2</sub>CF<sub>3</sub>;  
-NHC(O) C<sub>1-4</sub> alkyl.

26. A compound as claimed in any one of claims 18 to 20 wherein  $R^2$  is of formula –  
20 NH-SO<sub>2</sub>-V-T, T is selected from H; or diazole, oxazole, isoxazole, phenyl or phenoxy,  
optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
25 C<sub>1-12</sub> alkoxy;  
C<sub>1-12</sub> alkylthio;  
C<sub>1-12</sub> alkyl;  
C<sub>1-4</sub> alkylsulfonyl;  
-CN;  
30 -OCF<sub>3</sub>;  
-C(O)OC<sub>1-4</sub> alkyl;  
-OCH<sub>2</sub>CF<sub>3</sub>;



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-NHC(O) C<sub>1-4</sub> alkyl.

27. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-SO<sub>2</sub>-V-T, V is selected from 3-chloro-4-methylphenyl, 3-chlorophenyl, 3-methoxyphenyl, 4-bromophenyl, 4-methoxyphenyl, 4-methylphenyl, naphthyl, 2,4,6-trimethylphenyl, phenyl(CH=CH)-, 4-chlorophenyl, 2-chlorophenyl, 2,5-dichlorothien-3-yl, 2,5,6-trimethyl-4-methoxyphenyl, 4-methoxyphenyl, 2,3,4-trifluorophenyl, 3-cyanophenyl, 2-methoxycarbonylthien-3-yl or 4-pentylphenyl and T is H.
28. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-SO<sub>2</sub>-V-T, T is 2-chloro-5-nitrophenoxy and V is phenyl.
29. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-C(O)-V-T wherein V is selected from
- aryl;
  - aryl-C<sub>1-12</sub> alkyl;
  - diaryl-C<sub>1-12</sub> alkyl;
  - lactonyl; or
  - C<sub>1-18</sub> alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub> alkoxy, C(O)OC<sub>1-4</sub> alkyl, OC(O)C<sub>1-4</sub> alkyl, aryl-C<sub>1-4</sub> alkoxy, aryloxy.
30. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-C(O)-V-T, and V is selected from C<sub>1-12</sub> alkyl, phenyl, phenyl-C<sub>1-12</sub> alkyl, diphenylmethyl, naphthyl, furanyl, thienyl, diazoly, pyridinyl, thiazolyl, benzothienyl, fluorenyl, oxazolyl or isoxazolyl, optionally substituted with 1, 2, 3 or 4 substituents independently selected from
- NO<sub>2</sub>;
  - halogen;
  - CF<sub>3</sub>;
  - C<sub>1-12</sub> alkoxy;
  - C<sub>1-12</sub> alkylthio;
  - C<sub>1-12</sub> alkyl;
  - C<sub>1-4</sub> alkylsulfonyl;

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-CN;  
-OCF<sub>3</sub>;  
-C(O)O-C<sub>1-4</sub> alkyl;  
-OCH<sub>2</sub>CF<sub>3</sub>.

5

31. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-C(O)-V-T, T is selected from

H;  
halogen; or

10 diazole, oxazole, isoxazole, phenyl, phenoxy or benzodioxanyl optionally substituted with 1, 2, 3 or 4 substituents selected from

-NO<sub>2</sub>;  
halogen;  
-CF<sub>3</sub>;  
15 C<sub>1-12</sub> alkylthio;  
C<sub>1-12</sub> alkoxy;  
C<sub>1-12</sub> alkyl;  
C<sub>1-4</sub> alkylsulfonyl;  
-CN;  
20 -OCF<sub>3</sub>;  
-C(O)O-C<sub>1-4</sub> alkyl.

32. A compound as claimed in any one of Claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-C(O)N-V-T wherein V is selected from

25 C<sub>1-18</sub> alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub> alkoxy, C(O)OC<sub>1-4</sub> alkyl, OC(O)C<sub>1-4</sub> alkyl, aryl-C<sub>1-4</sub> alkoxy, aryloxy; aryl; or aryl-C<sub>1-12</sub> alkyl.

30 33. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula – NH-C(O)NH-V-T, V is selected from phenyl, phenyl-C<sub>1-12</sub> alkyl or naphthyl optionally substituted with 1, 2, 3 or 4 substituents selected from

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5  
 -NO<sub>2</sub>;  
 halogen;  
 -CF<sub>3</sub>;  
 C<sub>1-12</sub> alkylthio;  
 C<sub>1-12</sub> alkoxy;  
 C<sub>1-12</sub> alkyl;  
 C<sub>1-4</sub> alkylsulfonyl;  
 -CN;  
 -OCF<sub>3</sub>;  
 10 -C(O)O-C<sub>1-4</sub> alkyl.

34. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula –  
 NH-C(O)O-V-T, wherein V is selected from  
 C<sub>1-18</sub> alkyl optionally substituted with halogen, hydroxyl, C<sub>1-4</sub> alkoxy,  
 15 C(O)OC<sub>1-4</sub> alkyl, OC(O)C<sub>1-4</sub> alkyl, aryl-C<sub>1-4</sub> alkoxy, aryloxy;  
 aryl; or  
 aryl-C<sub>1-12</sub> alkyl.

35. A compound as claimed in any one of claims 18 to 20 wherein R<sup>2</sup> is of formula –  
 20 NH-C(O)O-V-T, preferably V is selected from phenyl or phenyl-C<sub>1-12</sub> alkyl optionally  
 substituted with 1, 2, 3 or 4 substituents selected from

25 -NO<sub>2</sub>;  
 halogen;  
 -CF<sub>3</sub>;  
 C<sub>1-12</sub> alkylthio;  
 C<sub>1-12</sub> alkoxy;  
 C<sub>1-12</sub> alkyl;  
 C<sub>1-4</sub> alkylsulfonyl;  
 -CN;  
 30 -OCF<sub>3</sub>;  
 -C(O)O-C<sub>1-4</sub> alkyl; or  
 -OCH<sub>2</sub>CF<sub>3</sub>.

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36. A compound as claimed in claim 13 wherein  $R^2$  is of formula  $-NH-C(O)-V-T$  wherein V is H,  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl, aryl or aryl- $C_{1-12}$ alkyl; and T is H, halogen,  $C_{1-5}$ alkyl,  $C_{1-4}$ alkoxy, nitro, aryl, aryl- $C_{1-4}$ alkyl, or aryloxy unless V is H in which case T is absent.

5

37. A compound as claimed in claim 36 wherein V is H,  $C_{1-6}$ alkyl or  $C_{3-6}$ cycloalkyl, and T is H unless V is H in which case T is absent.

10 38. A compound as claimed in claim 36 wherein V is aryl or aryl- $C_{1-12}$ alkyl, and T is H, halogen,  $C_{1-5}$ alkyl,  $C_{1-4}$ alkoxy, nitro, aryl, aryl- $C_{1-4}$ alkyl, or aryloxy.

39. A compound as claimed in claim 38  
15 wherein V is phenyl, pyridyl, thienyl, thiazolyl, thiadiazolyl, or phenyl- $C_{1-6}$ alkyl; and  
T is H, halogen,  $C_{1-5}$ alkyl,  $C_{1-4}$ alkoxy, nitro, aryl, aryl- $C_{1-4}$ alkyl, or aryloxy.

40. A compound as claimed in claim 13  
20 wherein  
 $R^1$  is -H,  
 $C_{1-12}$ alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol,  $C_{1-4}$ alkoxy or  $C_{1-4}$ alkylthio, or aryl- $C_{1-4}$ alkyl;  
25  $R^2$  is  $-NH_2$ , or  
 $-NH-Q-V-T$ , wherein Q is  $-C(O)-$ ,  $-C(O)-NH-$ ,  $-C(O)O-$ , or  $-SO_2-$ ;  
V is H, aryl, aryl- $C_{1-12}$ alkyl, diaryl- $C_{1-12}$ alkyl, lactonyl, or  $C_{1-18}$ alkyl optionally substituted with halogen, hydroxyl,  $C_{1-4}$ alkoxy, -  
30  $C(O)OC_{1-4}$ alkyl,  $-OC(O)C_{1-4}$ alkyl, aryl- $C_{1-4}$ alkoxy, aryloxy, or  $SO_2C_{1-4}$ alkyl; and

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T is H, halogen, aryl, aryl-C<sub>1-4</sub>alkyl, or  
aryloxy unless V is H in which case T is  
absent,

5 R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

10 R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine  
atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -  
SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

X is C;

W is C or N;

W' is C or N;

15 Y is C or N;

Y' is C or N;

provided that there are not more than two N atoms in the aryl ring and provided  
that at least one of W, W', Y or Y' is N;

m is 1, 2, or 3;

20 n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

41. A compound as claimed in claim 40  
wherein

25 W is C;

W' is C;

Y' is C; and

Y is N.

30 42. A compound as claimed in claim 40  
wherein

W is N;

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W' is C;

Y' is C; and

Y is C.

5 43. A compound as claimed in any one of claims 40 to 42

wherein

$R^2$  is  $-NH_2$ .

44. A compound as claimed in any one of claims 40 to 42

10 wherein

$R^2$  is  $-NH-Q-V-T$ , wherein

Q is  $-C(O)-$ ,  $-C(O)-NH-$ ,  $-C(O)O-$ , or  $-SO_2-$ ;

V is H, aryl, aryl- $C_{1-12}$ alkyl, diaryl- $C_{1-12}$ alkyl, lactonyl, or  $C_{1-18}$ alkyl optionally substituted with halogen, hydroxyl,  $C_{1-4}$ alkoxy, -

15

$C(O)OC_{1-4}$ alkyl,  $-OC(O)C_{1-4}$ alkyl, aryl- $C_{1-4}$ alkoxy, aryloxy, or  $SO_2C_{1-4}$ alkyl; and

T is H, halogen, aryl, aryl- $C_{1-4}$ alkyl, or aryloxy unless V is H in which case T is absent.

20

45. A compound as claimed in claim 44

wherein

Q is  $-SO_2-$  or  $-CO-$ .

25 46. A compound as claimed in Claim 13

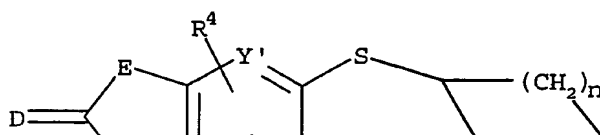
wherein:

$R^1$  is  $-H$ ,

$C_{1-12}$ alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol,  $C_{1-4}$ alkoxy or  $C_{1-4}$ alkylthio, or aryl- $C_{1-4}$ alkyl;

30

$R^2$  is linked back to the aromatic ring so as to form a fused bicyclic compound



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represented by Formula (Ia)

(Ia)

wherein D is O or S; and

5 E is O, S, NR<sup>5</sup>, or C(R<sup>5</sup>)<sub>2</sub>,

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

10 R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H or C<sub>1-4</sub>alkyl;

15 X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

20 provided that there are no more than two N atoms in the aryl ring,

m is 1, 2, or 3;

n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

25 47. A compound as claimed in Claim 46 wherein E is O or NR<sup>5</sup>.

48. A compound as claimed in Claim 46 or 47 wherein R<sup>5</sup> is/are each independently H or C<sub>1-4</sub>alkyl.

30 49. A compound as claimed in Claim 13

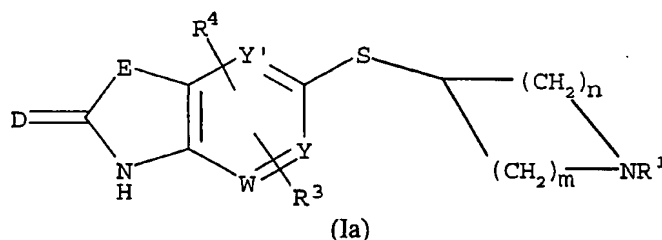
wherein:

R<sup>1</sup> is -H,

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C<sub>1-12</sub>alkyl optionally substituted with 1, 2 or 3 groups independently selected from halogen, hydroxyl, thiol, C<sub>1-4</sub>alkoxy or C<sub>1-4</sub>alkylthio, or aryl-C<sub>1-4</sub>alkyl;

R<sup>2</sup> is linked back to the aromatic ring so as to form a fused bicyclic compound represented by Formula (Ia)



wherein D is O or S; and

E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, CR<sup>5</sup><sub>2</sub>-O, CR<sup>5</sup><sub>2</sub>-S(O)<sub>n</sub>, CR<sup>5</sup><sub>2</sub>-NR<sup>5</sup>, CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, CO-NR<sup>5</sup>, or CR<sup>5</sup>=CR<sup>5</sup>;

R<sup>3</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>4</sup> is H, halogen, C<sub>1-4</sub>alkyl optionally substituted with from 1 to 3 fluorine atoms, cyano, CF<sub>3</sub>, OC<sub>1-4</sub>alkyl, aryloxy, arylC<sub>1-4</sub>alkyl, arylC<sub>1-4</sub>alkoxy, C<sub>3-10</sub>cycloalkoxy, carboxy, carbonamido, -CO-NH-C<sub>1-4</sub>alkyl, aryl, hydroxy, -SO<sub>2</sub>NH<sub>2</sub>, -SO<sub>2</sub>NHC<sub>1-4</sub>alkyl, or -C<sub>1-4</sub>alkyl-OH;

R<sup>5</sup> is each independently H, C<sub>1-4</sub>alkyl;

X is C;

W is C or N;

W' is C;

Y is C or N;

Y' is C or N;

provided that there are no more than two N atoms in the aryl ring;

m is 1, 2, or 3;



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n is 1, 2, or 3; and

the sum of m and n is 2, 3, 4, 5, or 6.

50. A compound as claimed in Claim 49 wherein E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO,  
5 CR<sup>5</sup><sub>2</sub>-CR<sup>5</sup><sub>2</sub>, or CR<sup>5</sup>=CR<sup>5</sup>.

51. A compound as claimed in Claim 49 or 50 wherein E is O-CR<sup>5</sup><sub>2</sub>, NR<sup>5</sup>-CO, or  
CR<sup>5</sup>=CR<sup>5</sup>.

10 52. A compound as claimed in any one of Claims 49 to 51 wherein R<sup>5</sup> is/are each  
independently H or C<sub>1-4</sub>alkyl.

53. A compound as claimed in any one of claims 18 to 35 wherein m is 2 and n is 1, 2  
or 3.

15

54. A compound as claimed in any one of claims 18 to 35 wherein m is 2 and n is 2.

55. A compound as claimed in any one of claims 18 to 35 wherein X, Y and W are C.

20 56. A compound as claimed in any preceding claim wherein R<sup>1</sup> is H or C<sub>1-3</sub>alkyl.

57. A pharmaceutical composition comprising a compound as claimed in any one of  
claims 8 to 56 with a pharmaceutically acceptable diluent or carrier.

25